nating in gangrene, and that the wound received in dissection was a mere coincidence, and did not produce the symptoms from which the patient suffered. As no post mortem examination was made, in consequence of the request of the patient, it is impossible to verify the correctness of this opinion; but it must be acknowledged, that the symptoms were very similar to those of inflammation of the mucous membrane of the intestines, and different from those usually produced by wounds received in dissection.

I. H.]

ART. IX. On the Safety and Advantages of Mercurial Inhalations.

By Samuel Jackson, M. D. of Northumberland, Pa.

THE beginning of the nineteenth century is distinguished in the medical world, far above any former period, for the persevering industry of physicians in rescuing many from an untimely grave, who but a few years ago were scientifically given over to the ravages of disease, and the triumphs of death. The iliac artery, the carotid, the innominata, the aorta, have all been tied; diseased ovaries have been removed; the abdomen has been opened and the invaginated bowels rectified; the thigh has been successfully amputated at the hip; the parotid gland dissected out; and bronchotomy is no longer considered an affair of tremendous moment. If we should pretend to bring before the profession a simple process, by which more lives may be saved than by all these splendid operations combined, we may yet hope to escape the imputation of empirical vanity, as it will appear extremely facile, and within the capacity of every attentive physician.

A successful method of curing common diseases confers little splendour, but infinite usefulness; for more patients die of a simple pleurisy and its consequences than of the whole group of maladies requiring those fearful operations. To make ourselves acquainted, therefore, with ordinary diseases, and their methods of cure, is the primary duty of the practical physician; and hence it was that while the students in the University of Edinburgh were curiously gaping over the dissection of a bicephalous child, one of their number, who afterwards became a celebrated physician, was found busily employed in examining the patients in the fever ward. He said that he should probably spend all his life among febrile diseases, but that he might never see a double-headed child again. Impressed with these sentiments, we shall venture to lay before the profession a method of treatment which we have found successful in some dangerous and almost hopeless states of disease. We offer it, not as absolutely proven, but

as in probation; and hope that it will claim the attention which the subject, independent of this paper most eminently merits.

It is well known that in many diseases there often occurs a condition of the system, which would appear to render all remedies utterly nugatory, unless the patient can be speedily brought under the alterative or deobstructing powers of mercury. Such is the state of things in many of the congested and inflammatory cases of typhus, as also of the yellow and other bilious fevers. We often read of physicians labouring in vain to salivate a patient; the medicine is slower than the disease, or probably his susceptibilities are locked up by inflam. mation or congestion. In the local phlegmasiæ, also, a speedier method of affecting the system is required. A pleurisy, to which you are probably called too late, is not half subdued before the patient begins to succumb. You have done all that can be done by bleeding, blisters, and antimony; but the disease goes on, and there is no remedy unless mercury can be brought into action. But in all probability you have depended, and very plausibly too, on the use of common remedies till it is now too late to affect the system; or if you finally attempt it by frictions and calomel, the total operation of these passes off by the bowels, and your only hope is gone.

To insure a speedy effect in these deplorable cases, we have been for several years in the practice of using inhalations of the medicine. by which the system is soon possessed of the mercurial excitement and all its salutary effects, as it regards these states of the system, are very quickly attained. The preparation which we prefer is a modification of Lalonette's; it is less offensive to the lungs than cinnabar, and as it is easily and quickly prepared of materials within every one's reach, it may be considered as always in readiness. But inamuch as our paper may fall into hands which are not in possession of a method of preparing it, we shall give an improved recipe from Abernethy's Surgical and Physiological Observations. It has been copied into Rees's Cyclop. art. Fumigat. into Cooper's Surgical Dict. art. Mercury—and probably into other books which we have not

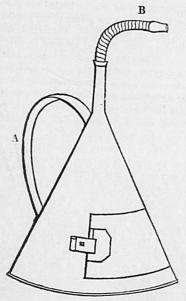
read, or which do not come into mind.

"Two drachms of aq. amm. are added to six ounces of distilled water, and four ounces of calomel are thrown into this liquor, and shaken with it; the powder is then separated by the filter and dried."

This is the preparation which was used by Pearson and Abernethy, for the peculiar fumigations recommended by Lalonette; but to this we shall add for the convenience of those who may not have the aq. amm. at hand, that the sp. amm. either simple or aromatic, is equally suitable. Rain or river water may be used when the distil-

led is not to be procured, and the medicine can be prepared in a single hour.*

When we first used fumigations, we evaporated the powder from a fire-shovel or a smoothing iron, and directed the smoke to the patient's face by means of a common funnel. This method answered pretty well, but a large portion of the medicine passed off laterally, without coming into the sphere of his respiration. To remedy this inconvenience, we covered the patient's head with a sheet, elevated on the segments of large hoops, and then evaporated the mercury within this little sudatorium; as by this means he could not fail of inhaling the proper quantity. But this method was altogether inadmissible when it became necessary to avoid an exhausting perspiration, and therefore we devised a little instrument which directs the whole volume of vapour immediately on the patient's lungs.



* We have not Pearson or Abernethy at hand, and it is many years since we read them. All the knowledge we possess of what they say on this subject, is derived from the above mentioned portions of Rees's Cyclopædia, and of Cooper's Surgical Dictionary.

The outline of this is a common tin funnel, about nine inches diameter at the base, with a flexible tube attached to the pipe. The base of the cone or funnel is closed with tin, and a door opens at the side large enough for the convenient introduction of a heated iron, weighing about two pounds. A little sheet-iron stand on the inside supports this iron, and thus prevents it from burning the bottom of the cone, or from rendering it too hot to rest occasionally on the bed. In the preceding figure, which will give an adequate idea of this little apparatus, A is a handle, which is very necessary as the cone becomes too hot to be held in the hand; B is a flexible tube of spiral wire covered with morocco, similar to that of Mudge's inhaler.

SWEDIAUR, in speaking of fumigating external sores with cinnabar, directs an iron funnel formed of one piece without solder—a precaution wholly unnecessary, as no amalgamation can take place with

either tin or solder in the present case.

To use the apparatus, let the iron be heated not quite to redness, and placed on the stand; about ten grains of the powder are then to be thrown upon it, and the door closed. The flexible tube directs the smoke to the patient's mouth, whether his head be covered, as above mentioned, or not. When the evaporation ceases, another such portion is thrown on the iron, and from two to six such portions may be used in immediate succession. This process may be repeated every two, four, six, or eight hours, according to the exigencies of the case. When this method has been used for several days, the attendants have been salivated, and they must therefore be cautioned against respiring the fumes more than is unavoidable.

We should not think it necessary to observe, were it not in our own defence, that we ought to be more assiduous in watching the effects than when mercury is used in any other form. We have brought the system under the influence of it in twelve hours; and we presume, from our little experience, that it must be a very intractable state of the body which can hold out more than two or three days. In the use, however, of this hitherto dreaded mode of administering the remedy, we must regard the pulse and the general system; for if in these the happy effects of mercurialization are observed, we must proceed with the utmost caution; but as soon as the fetid breath is perceived, we ought to suspend the operation, as the present object is now attained, and if additional mercury be required, we can administer it in the ordinary way.

We are well aware that the intelligent reader already presumes to recognise in this method an exploded practice; but here we must implore his patience, while we set this matter in its proper light. Cri-

tics are sometimes too quick for their own understandings, and not unfrequently condemn before they comprehend. Let it be observed, therefore, that it was once the practice to expose the body and lungs of venereal patients to the fumes of mercury, in order to excite a salivation, instead of using the medicine by pills or inunction; but no where do we learn, as far as our limited reading extends, of snatching patients from the very grasp of death, by administering the fumigation in common diseases; for however well established may be the practice of salivating such patients, the present method of doing it seems to have escaped the diligence of medical investigation. following quotation from Bell on Lues Venerea, will determine at once what the practice was, and also upon what principles it was abandoned; at the same time it will show how easily the system is affected, even when the vapour is not directed in a full stream on the lungs.

"The fumes of mercury are applied to the body by burning different mercurial calces in the patient's chamber. By thus breathing, as it were, a mercurial atmosphere, and having the fumes equally applied to every part of the surface of the body, the usual effects of mercury upon the system are soon produced, more quickly, perhaps, than by any other method. Where it is meant to raise a salivation suddenly, or to throw mercury quickly into the system, this is perhaps the surest method of doing it; for with the fumes of mercurv a salivation is sometimes excited in the course of a few hours. This brought the practice into much repute, when salivation alone was considered as the chief part of the cure; but now when it is known that lues venerea may be cured without much salivation; that the more gradually the mercury is thrown into the system, the more effectually it operates; and that very violent effects are sometimes produced by fumigating with mercury, the practice has of late been very generally laid aside."

The author then goes on to show the many advantages of directing the fumes upon syphilitic ulcers, and even acknowledges that he had "met with a few cases in which the mercury either went off too rapidly by stool when taken into the stomach, or where it was not absorbed, if applied in form of unction to the surface of the body, and in which it soon proved effectual when used in this manner."

More recently we hear nothing of the respiration of mercury, unless for the purpose of applying the medicine directly to ulcers in the fauces. Lalonette and Abernethy were no doubt impressed with some horrific phantom of danger, in contemplating the exploded practice, since they enclosed the naked patient in a tin box, with his head extruded, so that he might breathe the pure air, while the fumes were operating on the external body. They excited a salivation with great certainty, but many of the patients whom our method regards, can-

No. II.-Feb. 1828. T407 not be removed from their beds to be thus incommodiously enclosed in a tin box.

The peculiarity, therefore, of the practice we are now recommending is reduced to these two points:—First, to direct the fumes to the lungs only, as this can be done without any disturbance to the debilitated patient; and secondly, to use them in all cases of common diseases for which a salivation may be indicated, and there is not time to effect it; or not sufficient excitability remaining to be acted upon by the medicine in common form.

With respect to the safety of this method, we presume there will be some question in the mind of every reader. Even the fumigation of the surface was denounced by Cullen as a dangerous experiment, and it was, therefore, not without some trepidation that we ventured to apply it to a surface as extensive as the skin, and infinitely more susceptible of gaseous impregnations. It will no doubt be considered as rather an uncertain method, as the quantity the patient may respire, will be very different in different cases. But the same objection lies against its internal and cuticular use; for though we can in these applications limit the quantity, yet some stomachs and some skins are surprisingly sensible to the medicine, while others can hardly be affected, however zealous and intrepid our endeavours. It is true that we can form a pretty correct estimate of the mercurial excitability in many states of the system, but in many others we have much to learn; and since mercurialization is at all times a tentative process, the present method of tentation may possibly be rendered as safe as any of those in ordinary use.

The safety of the method, however, and its celerity also, are set forth, and in some measure confirmed, by an extract of a letter from Captain Sykes, published in the London Medical and Physical Journal, for March, 1827, and republished in the North American Medical and Surgical Journal, vol. iv. p. 172. A retort exploded in which mercury was distilling with lime, and the vapours salivated several persons in the course of twenty-four hours, a fact which the physicians of the army improved to their immediate use. The captain says—

[&]quot;Our medical men produce salivation in twenty-four hours, and I have heard of a recent instance of its being produced in seven hours, by fumigation. My shastree, a learned Brahmin, asserts, that the practice of exciting salivation, by means of inhaling mercurial vapour, has been used by the Hindoos from time immemorial. Bees-wax is melted, and spread over strips of thin cotton cloth; an equal quantity of cinnabar in powder is spread over the waxed strips, which are then rolled up in the shape of candles. The person to be salivated is seated

on the ground and a blanket is thrown over him; the lighted cinnabar candle is placed under the blanket, so that he inhales the vapour."

The captain expressed some doubts of this pretended antiquity of the practice, but the shastree pointed out a passage in an ancient Sanscrit work, in which the process was described. This may have been an Indian imposition, unless the captain understood the language. The letter, however, and particularly the fact of the physicians having adopted the practice, is a very striking instance in proof of the practicability of our method. We may expect to hear, in due time, all the particulars, and the general result of their experiments.

In offering this remedy to the consideration of the medical public, let it be remembered that we propose it in those cases only which are nearly desperate under all common methods of treatment; nor even in these should we use it, at least in the present state of our knowledge, unless in all probability there might not be time to mercurialize the system in any other way. We are not proposing any new indications, but merely a new method of fulfilling those which have long been considered as perfectly orthodox. The practice of salivating in fevers, is with us by no means a favourite: on the contrary, we consider it as a painful and justly odious remedy, which not unfrequently prolongs the patient's distress; but every one knows there are states of the system, in almost every species of fever, which to all human eyes, cannot be relieved in any other way, and in these nearly all learned physicians have agreed to use mercury, until some milder method be discovered. Such are many congested and inflammatory cases, in which the free use of venesection is often inadmissible. Dr. Armstrong relies greatly on the use of mercury in all these dangerous states of typhus; and we have long heard, and shall probably long continue to hear, of the imperious necessity of salivation, in very many cases of yellow fever. This disease, as it appeared in Philadelphia in 1820, was an intractable malady, and the physicians relied greatly on ptyalism, but they were often unable to attain it.*

In the puerperal fever, a most interesting and alarming disease, large doses of calomel have been given, as in yellow fever, for the two-fold purpose of exciting catharsis and salivation. Many cases of this disease run so rapidly through the stage of excitement, that every thing must be done within a few hours, or the patient is lost. Some of these as related by Denman and Armstrong, are highly congested states of fever that might possibly be prepared for the operation of mercurial fumes by the warm bath, frictions, and external stimuli;

^{*} Dr. Jackson's Essay, Philadelphia Journal, vol. 2, sub principio.

but, however this may be, we should propose this method as a last resort in all cases that have been too long neglected, maltreated, or that are sunk so low that venesection can be used no further, while unsuppurated inflammation is known to be in progress. From what we have seen of the puerperal fever we should consider the late practice of rubbing the abdomen with mercurial ointment as entirely futile. In fact, those cases that we have seen of the genuine disease would not tolerate such frictions, nor indeed any thing heavier than the anomating with a feather. We suspect this practice had its origin in the supposed analogy between the inflammation of puerperal fever and erysipelas; and we presume that time will find it as useless in the internal, as it is now demonstrated to be in severe cases of the external disease.

Upon the same principle that we should use it in puerperal fever, we should also recommend it in every species of internal inflammation, in which depletion could be carried no further, and there might not be time to introduce the medicine in the ordinary way.

In the pneumonia typhodes, which runs its fatal course in old weakly people and drunkards, with most appalling rapidity, we first conceived the idea of using these fumigations; but we have not tried them, as the disease disappeared from our circle of practice, when the bilious fevers invaded us, seven years ago. To these patients when broken down with old age or intemperance, venesection is certain death, so also is a profuse perspiration; and if the disease is not arrested before it inundates the bronchiæ-væ medico, the sick man, is forthwith suffocated. The very process of nature which cures the robust, is certain to destroy the debilitated.

Physicians have long placed their affections on mercury in hydrophobia, but complain that time is wanting to affect the system. confess that to us a salivation has always appeared a very promising remedy, as the fatal symptoms would seem to depend on such internal inflammations and lesions as a strong mercurial excitement, is known

to prevent, and often to remedy.

A disease almost as fatal as the hydrophobia, has lately become so frequent as to impress the most ardent and fearless votary of anatomical knowledge with terror and dismay. We presume the mercurial vapour will appear a promising remedy; and particularly if the malady should reach the fauces, as it once did in my own person, from having dissected a child who died of a very uncommon suppurative disease of this part.

In all venereal sores which are making rapid progress, and in which it is therefore desirable to arrest the disease without further loss of

substance, the practice of fumigating them has been long established. By directing the fumes on a man's nose, in order to save it quickly from further erosion, we salivated him in three days, though his system had resisted every form of mercury which a skilful physician had been giving him for four months. But on this subject there can be no disputation; we only mention the fact in order to show with what great facility the medicine operates.

Case I. John Mullin of this town, after repeated attacks of remittent and intermittent fever, applied to me last January, in the following deplorable condition. From having been a very healthy, vigorous man, with a blooming complexion, he was now pale and cadaverous the conjunctiva bluish and shining—the features pointed—tongue foul-pulse 120, quick, salient, full, and strong-hard, dry cough, with pain under the sternum, and great difficulty of respiration-a dull pain in the region of the liver affecting the point of the right shoulder-the spleen enlarged-the legs ædematous-urine common in quantity, but very red, and without sediment-frequent epistaxis, with blood highly inflammatory.

Bleeding and blisters with their various coadjuvants were liberally used for the first week without any evident amendment, and as he was now supposed to be in a state of preparation for mercury, the calomel was given combined with squills. But before this had time to affect the system, he unexpectedly sunk surprisingly, and was justly considered hopeless by all his friends. The cough was very severe and dry, his breathing difficult, his pulse small, weak, salient, 140 in the minute; his whole appearance was that of a lost man. He was supported by the steady use of nourishing diet, and moderate internal, with powerful external stimuli; in two days the fumigations took effect, his mouth became sore, and a striking amendment appeared in his whole constitution. The salivation was continued by using the blue pill, and though the disease developed itself in a universal dropsy, he was carried safely through all his maladies and restored to robust health.

In this case the patient was sinking rapidly under an inflammation of the lungs, liver, and probably of other internal parts, and no medicine with which we are acquainted, the mercury excepted, could have been of any avail, nor do we believe that any other method of using it would have been successful. If it be said that calomel might have been used sooner, we may reply, that the morbid action was so high as to resist its salutary operation. When at last it was determined that mercury was the only remedy, the patient fell unexpectedly into such a state of collapse that calomel could not have been given without the utmost danger of a fatal catharsis; nor in fact would there have been time to obtain the specific operation of this or of any other of the common preparations. The poor man was ready to sink under a severe inflammation with incipient effusion, and nothing but the prompt operation of mercury could have arrested this precipitous disease, and prepared the system for the recuperative powers of nature.

Case II. Thomas, son of James Glydewell, three miles north of Northumberland, was seized in the winter of 1823, with bilious or bilioso-nervous colic, which was then almost an epidemic in our neighbourhood. While he was taking calomel and opium for the two-fold purpose of procuring comfort and exciting salivation, a severe purging of bloody slime took place, and reduced him in one night almost to the point of death. We found him in the morning nearly without a pulse, with the catharsis still going on, while the system was not the least affected with the specific influence of mercury.

Opium was given freely, and many stimuli used with the utmost diligence, among which were tinct. of cloves—comp. tinct. of bark—frictions with external heat—soup, and arrow-root. The mercurial fumigations were used by my own hands, for I did not leave the house during eight hours, as the patient was a young man of no little importance to his poor and laborious parents. But he gradually sunk till at midday he was without a pulse at the wrist, and at four o'clock his legs were cold. We now left him perhaps two hours, while we went half a mile, to open the body of another patient recently dead of the same disease, and upon our return we found him still sinking and laboriously engaged in giving valedictory charges to each member of the family. This exertion we presumed would soon cut his last thread, and therefore we left him—but with strict injunctions that he should be faithfully stimulated and nourished till they might find him certainly dying.

The next morning we rose by daylight, in order to expedite business and save time for opening the body. Far different was his fate. An old neighbour came smiling to the door at this early hour with the welcome but mysterious news that Thomas was better. The fact was that the mother, between hope and despair, persevered with the stimuli, and in the course of the night the mercury took effect and saved his life.

We shall not add more cases, as we have never taken daily notes of diseases, unless in a very few instances; having depended more

upon the recording of general results and the establishment of general principles. We have used the remedy in twelve cases with all the advantages that we could wish to derive from it, nor did we excite an excessive ptyalism in one single instance. It failed only in the case of a maniac, but here we believe it was not fairly tried. We have often lamented our omission of this medicine and our dependance upon gentler measures, but never have regretted the use of it in a single case.

We must here caution the reader against imputing to us the empirical folly of bringing forward a remedy which is to be infallible in the case of every dying patient: like all things human, it will often fail, even when tried under promising circumstances. All that we pretend is this, that it will sometimes succeed in affecting the system with mercury when other means would fail; and that, consequently, it renders one important indication in medicine, infinitely more facile and certain than it has hitherto been. Nor let any one suppose that we presume to have established this method as infallibly useful and imitable. Many unobserved and even inscrutable circumstances may have concurred in promoting the favourable operation of the mercury in our various cases, as a fortunate coadjuvancy of things unseen may for a time give a medicine some factitious reputation, which a multiplied experience will generally diminish or entirely nullify-a mortifying fact that has long been known in our tentative

Against the use of ptyalism in fevers much clamour has been raised, and, as stated above, we confess ourselves most vehemently hostile to the practice, whenever gentler measures will ensure our safety; but we cannot join in that indiscriminate reprobation of the practice in which some physicians find too much delight, and thus inculpate their own understandings as well as degrade and bring into suspicion the whole science of medicine. Dr. Hosack, in one of his reports to the governors of the New York Hospital, does fairly represent that mercury is a dangerous and highly mischievous remedy. When speaking of his typhous patients, he says, "they recover without that injury to the constitution, and that liability to rheumatism and other inflammatory diseases, that we frequently observe in those who have undergone the operations of mercury."*

science.

We shall bow with becoming submission to such high authority, but at the same time shall observe that every careful practitioner

^{*} Appendix to Thomas's Practice and Eclect. Rep. x. 274.

must have startled at this passage, and have begun to look around among his patients with no little anxiety, to ascertain whose constitution he had injured, and whom he had endowed with a liability to rheumatism and other inflammatory diseases. There is already too much prejudice in the world against this medicine, and physicians would confer respect on the profession by endeavouring to diminish it; while by thus holding it up to the blind inquisition of the reading community, they will weaken public confidence, and greatly derogate from the honour and utility of the healing art. The public ought to be apprised that almost any medicine is variously dangerous in the hands of ignorant temerity; but that learning and honour may be confidently trusted with the most powerful agents in the materia medica. As far as regards our own observations, whether confined to one particular practice or extended occasionally into that of other physicians, we have never seen any of these evils result from mercury. But at the same time we have fortunately had it in our power, through the long-continued use of the suspicious mineral, to relieve patients of chronic rheumatism or something similar though perhaps worse-the unhappy result of the non-mercurial practice in syphilis. So pitiable has been the condition of some wretched beings who have come from seaports, and from under the care of the anti-mercurial doctors, that we can no longer read of their opiate, and acid, and golden recipes, without some feelings of reprobation and contempt.*

• [We believe our coadjutor has viewed the cases to which he alludes, through the medium of strong prejudices. For our own part, at least, we lament that the non-mercurial practice in venereal disease is not more generally adopted. We certainly have not met with any case, properly treated upon that plan, in which we have had reason to believe that the patient suffered from mercury having been withheld, and we certainly have met with not a few in which it has been unavailing, and many in which the most distressing consequences have followed its exhibition.

"Mr. Rose has published in the Medico-Chirurgical Transactions, an account of 120 cases cured without mercury in his military practice during a year and three quarters. Mr. Guthrie successfully treated 100 cases in the same manner, and has seen notes of 400 more cured without mercury in the different hospitals. Dr. John Thomson relates 155 cases similarly cured by him in the Consolidated Depot Hospital at Edinburgh Castle. Mr. Hennen has published 105 equally successful cases, 20 of which were cases of true Hunterian chancre. And in a general investigation, undertaken by the surgeons of the British army, it appeared that, out of 4767 cases, 1940 were cured without mercury. Of these, 96 had secondary symptoms, but every man was fit for military duty immediately on his dismissal from the hospital. The average period for the

Ptyalism, as we have stated above, is a foul, painful, odious remedy, and never to be used when the safety of the patient is not at stake, or when gentler means will almost certainly succeed; but a little present distress is never to be weighed in the balance against certain danger, or even against lasting pain. The highest authorities in medicine have clearly shown, that, in every species of fever many patients are saved by mercury, who would be otherwise certainly lost; and this fact alone is a sufficient argument for our present purpose, since, as we have already said, we are not inventing a new indication in medicine, but a new and more successful method of fulfilling an old one. Whoever believes himself ready to perish, will gladly lay hold of this means of safety, however uncomfortable; let us then do unto others, as we would they should do unto us, and fly to mercury as the last hope. It will not only avert impending danger, but in many cases it will remove old obstructions, break up morbid associations, create new capacities of life, and almost regenerate the whole man: it is, with the solitary exception of cinchona, the greatest medical blessing which a benevolent Providence has conferred on his suffering creatures.

cure of primary symptoms was 21 days, and of secondary 36 days. The remaining 2827 were treated with mercury: 51 of these had secondary symptoms, and two men were rendered unfit for the service. The average period for the cure of primary symptoms was 33 days, and of secondary 45. The foregoing cases, it is stated, include not only the more simple sores, but also a regular proportion of those with the most marked character of syphilitic chancre. On a survey of the results it appears, that under the non-mercurial treatment, the disease more frequently advanced to the secondary symptoms—but that, on the whole, the average time of cure, both of primary and secondary symptoms, was less than it was in the cases where mercury was employed."—Bigelow's Sequel.

For further proofs of the efficacy and safety of the non-mercurial, or physiological practice, in syphilis, we refer to the valuable paper of Dr. Harris, in the North American Medical and Surgical Journal, vol. i. p. 38—to the work of Devergie, for a notice of which see our last number—to the elaborate treatise of De Brus, a review of which will be found in our present number—and the article Mercury in Chapman's Elements of Therapeutics.

I. H.]